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Search Results - Record(s) 1 through 9 of 9 returned.

☐ 1. Document ID: US 6262180 B1

L2: Entry 1 of 9 File: USPT Jul 17, 2001

US-PAT-NO: 6262180
DOCUMENT-IDENTIFIER: US 6262180 B1

TITLE: High temperature-stable fluorochemicals as hydrophobic and oleophobic additives to synthetic organic polymers

DATE-ISSUED: July 17, 2001

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Klun; Thomas P.	Lakeland	MN		
Gasper; Alton J.	Minneapolis	MN		
Temperante; John A.	St. Paul	MN		

US-CL-CURRENT: 525/199; 428/221, 428/411.1, 524/319, 524/462, 525/165, 525/178, 525/200

ABSTRACT:

This invention describes hydrophobic and oleophobic fibers, films and molded articles comprising synthetic organic polymer wherein dispersed within the fiber, fabric or molded article and present at the surface of the fiber, fabric or molded article are fluorochemical compounds. Method of preparing such fibers, films and molded articles, as well as articles made therefrom also are disclosed.

23 Claims, 0 Drawing figures Exemplary Claim Number: 1

Full | Title | Citation | Front | Review | Classification | Date | Reference | KWIC | Draw Desc | Image

☐ 2. Document ID: US 6176952 B1

L2: Entry 2 of 9 File: USPT Jan 23, 2001

US-PAT-NO: 6176952
DOCUMENT-IDENTIFIER: US 6176952 B1

TITLE: Method of making a breathable, meltblown nonwoven

DATE-ISSUED: January 23, 2001

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Maugans; Rexford A.	Lake Jackson	TX		
Allgeuer; Thomas T.	Wollerau			CHX
Martin; Jill M.	Pearland	TX		

US-CL-CURRENT: 156/73.1; 156/290

ABSTRACT:

The present invention relates to a method of making a breathable nonwoven fabric having enhanced moisture barrier properties. In particular, the invention pertains to a method of making a meltblown fibrous layer having an improved hydrohead performance (e.g. greater than 40 millibars (16 inches of H.sub.2 O) and adjacent to at least one spunbond fibrous layer, wherein the method comprises secondary processing of the meltblown layer prior to bonding to spunbond layers. The resultant spunbond/meltblown (SM) nowoven fabric is breathable and characterized as having a cloth-like feel and softness and enhanced hydrohead performance rendering it suitable for use in, for example, personal hygiene, disposable industrial garment and infection control/clean room applications for items such as coverings, incontinence pads and diapers, especially as a diaper backsheet or containment flap.

17 Claims, 1 Drawing figures Exemplary Claim Number: 1
Number of Drawing Sheets: 1

☐ 3. Document ID: US 6060410 A

L2: Entry 3 of 9 File: USPT May 9, 2000

US-PAT-NO: 6060410
DOCUMENT-IDENTIFIER: US 6060410 A

TITLE: Coating of a hydrophobic polymer substrate with a nonstoichiometric polyelectrolyte complex

DATE-ISSUED: May 9, 2000

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Gillberg-LaForce; Gunilla Elsa	Roswell	GA	30076	
Gadsby; Elizabeth Deibler	Marietta	GA	30068	

US-CL-CURRENT: 442/118; 427/384, 427/394, 428/523, 442/170, 442/171, 442/400, 442/401

ABSTRACT:

A method of coating the surface of a substrate, such as a film or a fibrous web, which is composed of a hydrophobic polymer. The method involves providing a solution of a first polyelectrolyte having ionizable groups and a solution of a second polyelectrolyte having ionizable groups. The two solutions then are mixed under conditions adapted to result in the formation of a nonstoichiometric polyelectrolyte complex. Finally, the surface of the hydrophobic polymer substrate is contacted with a solution of the complex under conditions sufficient to result in the coating of the surface of the substrate with the complex. The ionizable groups of the second polyelectrolyte have a latent charge opposite the latent charge of the ionizable groups of the first polyelectrolyte. Moreover, the amounts of the first and second polyelectrolytes are selected to give a ratio of the number of ionizable groups in the first polyelectrolyte to the number of ionizable groups in the second polyelectrolyte of at least about 2, and the molecular weight of the first polyelectrolyte is at least about 40,000 daltons and at least about 2 times the molecular weight of the second polyelectrolyte.

23 Claims, 0 Drawing figures Exemplary Claim Number: 21

☐ 4. Document ID: US 5498463 A

L2: Entry 4 of 9 File: USPT Mar 12, 1996

US-PAT-NO: 5498463
DOCUMENT-IDENTIFIER: US 5498463 A

TITLE: Polyethylene meltblown fabric with barrier properties

DATE-ISSUED: March 12, 1996

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
McDowall; Debra J.	Roswell	GA		
Sawyer; Lawrence H.	Roswell	GA		
Strack; David C.	Canton	GA		
Timmons; Terry K.	Marietta	GA		

US-CL-CURRENT: 428/198; 128/849, 156/308.4, 156/62.4, 156/62.6, 156/62.8, 156/73.1, 428/315.9, 428/316.6, 428/903, 442/382

ABSTRACT:

A nonwoven fabric is provided which has good barrier properties, softness and breathability. A linear low density polyethylene is used in a meltblown layer in this invention to provide barrier properties comparable to polypropylene. The meltblown layer may be used in a multilayer laminate and the other layers may be comprised of bicomponent fibers. The fabric may be used in, for example, diapers, feminine hygiene products, adult incontinence products, wound dressings, bandages, sterilization wraps, surgical gowns and drapes and wipers.

17 Claims, 3 Drawing figures Exemplary Claim Number: 1,2
Number of Drawing Sheets: 2

☐ 5. Document ID: US 5288791 A

L2: Entry 5 of 9 File: USPT Feb 22, 1994

US-PAT-NO: 5288791
DOCUMENT-IDENTIFIER: US 5288791 A

TITLE: Low stress relaxation elastomeric fibers

DATE-ISSUED: February 22, 1994

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Collier, IV; L. Warren	Alpharetta	GA		
Stopper; Steven R.	Doraville	GA		

US-CL-CURRENT: 524/505; 428/903, 442/329, 525/89, 525/98

ABSTRACT:

An elastic nonwoven web is formed from elastic fibers composed of a blend of (1) a styrene-poly(ethylene-propylene)-styrene thermoplastic elastomeric block copolymer or a mixture of a styrene-poly(ethylene-propylene)-styrene elastomeric block copolymer and a styrene-poly(ethylene-butylene)-styrene elastomeric block copolymer, and (2) a tackifying resin in which the elastic nonwoven web has a stress relaxation of less than about 30 percent. The blend used to form the elastic nonwoven web and/or elastic fibers may also include a polyolefin and an extending oil.

17 Claims, 7 Drawing figures Exemplary Claim Number: 1
Number of Drawing Sheets: 7

☐ 6. Document ID: US 5260126 A

L2: Entry 6 of 9 File: USPT Nov 9, 1993

US-PAT-NO: 5260126
DOCUMENT-IDENTIFIER: US 5260126 A

TITLE: Low stress relaxation elastomeric nonwoven webs and fibers

DATE-ISSUED: November 9, 1993

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Collier, IV; L. Warren	Alpharetta	GA		
Stopper; Steven R.	Doraville	GA		

US-CL-CURRENT: 442/329; 428/903, 442/361, 524/505

ABSTRACT:

An elastic nonwoven web is formed from elastic fibers composed of a blend of (1) a styrene-poly(ethylenepropylene)-styrene thermoplastic elastomeric block copolymer or a mixture of a styrene-poly(ethylenepropylene)-styrene elastomeric block copolymer and a styrene-poly(ethylene-butylene)-styrene elastomeric block copolymer, and (2) a tackifying resin in which the elastic nonwoven web has a stress relaxation of less than about 30 percent. The blend used to form the elastic nonwoven web and/or elastic fibers may also include a polyolefin and an extending oil.

30 Claims, 7 Drawing figures Exemplary Claim Number: 14
Number of Drawing Sheets: 7

☐ 7. Document ID: US 4923742 A

L2: Entry 7 of 9 File: USPT May 8, 1990

US-PAT-NO: 4923742
DOCUMENT-IDENTIFIER: US 4923742 A

TITLE: Elastomeric polyether block amide nonwoven web

DATE-ISSUED: May 8, 1990

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Killian; Thomas M.	Green Bay	WI		
Wisneski; Tony J.	Kimberly	WI		

US-CL-CURRENT: 442/329; 428/359, 428/364, 428/903, 442/400, 442/417

ABSTRACT:

An elastomeric nonwoven web is formed by meltblowing fibers composed of a polyether block amide copolymer.

5 Claims, 4 Drawing figures Exemplary Claim Number: 1
Number of Drawing Sheets: 3

☐ 8. Document ID: US 4874666 A

L2: Entry 8 of 9 File: USPT Oct 17, 1989

US-PAT-NO: 4874666
DOCUMENT-IDENTIFIER: US 4874666 A

TITLE: Polyolefinic biconstituent fiber and nonwove fabric produced therefrom

DATE-ISSUED: October 17, 1989

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Kubo; Eiichi	Kyoto			JPX
Nagaoka; Koichi	Kyoto			JPX
Miyahara; Yoshiki	Kyoto			JPX
Kiriyama; Syunichi	Nara			JPX
Mishima; Yasunobu	Kyoto			JPX

US-CL-CURRENT: 428/398; 428/364, 428/397, 428/401, 525/240

ABSTRACT:

A biconstituent fiber having good spinnability, a binder fiber made thereof, and a nonwoven fabric produced therefrom and which has high tensile strength and comfortable soft touch are provided. The biconstituent fiber is composed of linear low-density polyethylene and crystalline polypropylene and may be hollow or flat in cross section. A binder fiber may be produced from a bicomponent structure in which the biconstituent fiber serves as a sheath component and polyethylene terephthalate as a core component.

7 Claims, 0 Drawing figures Exemplary Claim Number: 1

Full | Title | Citation | Front | Review | Classification | Date | Reference
KWIC | Draw Desc | Image

☐ 9. Document ID: US 4820572 A

L2: Entry 9 of 9 File: USPT Apr 11, 1989

US-PAT-NO: 4820572
DOCUMENT-IDENTIFIER: US 4820572 A

TITLE: Composite elastomeric polyether block amide nonwoven web

DATE-ISSUED: April 11, 1989

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Killian; Thomas M.	Green Bay	WI		
Wisneski; Tony J.	Kimberly	WI		

US-CL-CURRENT: 442/328; 428/171, 428/172, 428/903, 442/344

ABSTRACT:

An elastomeric nonwoven web is formed by meltblowing fibers composed of a polyether block amide copolymer.

15 Claims, 4 Drawing figures Exemplary Claim Number: 1
Number of Drawing Sheets: 3

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Search Results - Record(s) 1 through 10 of 10 returned.

☐ 1. Document ID: US 6027593 A

L1: Entry 1 of 10 File: USPT Feb 22, 2000

US-PAT-NO: 6027593
DOCUMENT-IDENTIFIER: US 6027593 A

TITLE: Process for the fabrication of disposable diapers and other disposable products and a disposable diaper

DATE-ISSUED: February 22, 2000

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Lunt; Audrey	Orchard Park	NY	14127	
Ward; Gregory F.	Alpharetta	GA	30202	

US-CL-CURRENT: 156/178; 156/290, 604/366, 604/370

ABSTRACT:

The present invention relates to a rapid and low cost procedure for joining webs and films containing dissimilar polymers. It is especially applicable but not limited to the construction and assembly of disposable products such as infant and adult incontinent products, feminine hygiene products, and other low-cost, high volume disposable products. The process involves producing a high rate of heat flux through the dissimilar materials where the material with the higher plastic point is at the influx point and the lower plastic point material is adjacent and further from the heat source. In addition to this constraint and as a necessary component the application of the high rate of heat flux must be accompanied by a pressure of appropriate to the difference in plastic points and to the relative thickness of the dissimilar materials to be joined.

4 Claims, 7 Drawing figures Exemplary Claim Number: 1
Number of Drawing Sheets: 4

Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw Desc | Image

☐ 2. Document ID: US 5913993 A

L1: Entry 2 of 10 File: USPT Jun 22, 1999

US-PAT-NO: 5913993
DOCUMENT-IDENTIFIER: US 5913993 A

TITLE: Nonwoven nylon and polyethylene fabric

DATE-ISSUED: June 22, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Ortega; Albert E.	Pensacola	FL		
Thomley; R. Wayne	Pensacola	FL		

US-CL-CURRENT: 156/167; 156/180, 156/181, 156/296, 156/308.2, 156/308.4, 442/401

ABSTRACT:

The invention relates to a nonwoven fabric made from a nylon and polyethylene blend. The addition of polyethylene enhances specific properties such as softness, lower production cost, improved process capabilities, and ease of further downstream processing such as bonding to other fabrics or itself.

5 Claims, 0 Drawing figures Exemplary Claim Number: 1

☐ 3. Document ID: US 5895710 A

L1: Entry 3 of 10 File: USPT Apr 20, 1999

US-PAT-NO: 5895710
DOCUMENT-IDENTIFIER: US 5895710 A

TITLE: Process for producing fine fibers and fabrics thereof

DATE-ISSUED: April 20, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Sasse; Philip Anthony	Alpharetta	GA		
Pike; Richard Daniel	Norcross	GA		

US-CL-CURRENT: 442/334; 264/171.1, 264/172.14, 264/172.17, 442/361, 442/362, 604/358

ABSTRACT:

The disclosed invention relates to split fibers and improved means and methods for obtaining them as well as their use in nonwovens and incorporation into personal care and other products. Multicomponent filaments are formed including at least two incompatible components. These filaments are drawn under hot aqueous, for example, steam, conditions causing them to split into fibers containing the incompatible components. These fibers are collected as a fine fiber nonwoven which finds utility as a component of sanitary napkins, diapers and other products.

24 Claims, 2 Drawing figures Exemplary Claim Number: 1
Number of Drawing Sheets: 2

☐ 4. Document ID: US 5858515 A

L1: Entry 4 of 10 File: USPT Jan 12, 1999

US-PAT-NO: 5858515
DOCUMENT-IDENTIFIER: US 5858515 A

TITLE: Pattern-unbonded nonwoven web and process for making the same

DATE-ISSUED: January 12, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Stokes; Ty Jackson	Suwanee	GA		
Dunkerly, II; Cedric Arnett	Alpharetta	GA		
Clark; Darryl Franklin	Alpharetta	GA		
Honer; Scot Patrick	Corinth	MS		

US-CL-CURRENT: 428/195; 156/167, 156/181, 428/100, 428/219, 428/220, 442/361, 442/381, 442/394, 604/366, 604/391

ABSTRACT:

The present invention is directed to a pattern-unbonded nonwoven fabric having continuous bonded areas defining a plurality of discrete unbonded areas, which is suitable for use as an improved loop fastening material for hook and loop fastening systems. The fibers or filaments within the discrete unbonded areas of the present invention are dimensionally stabilized by the continuous bonded areas that encircle or surround each unbonded area. The spaces between fibers or filaments within the unbonded areas remain sufficiently open or large to receive and engage hook elements of a complementary hook material. The hook material can be any of a wide variety of commercially available hook components which, as is known in the art, typically include a base material from which a plurality of hook elements project. The present invention further is directed to a process for making such a pattern-unbonded nonwoven fabric including the steps of providing a nonwoven fabric or web, providing opposedly positioned first and second calender rolls and defining a nip therebetween, with at least one of said rolls being heated and having a bonding pattern on its outermost surface comprising a continuous pattern of land areas defining a plurality of discrete openings, apertures or holes, and passing the nonwoven fabric or web within the nip formed by said rolls.

21 Claims, 6 Drawing figures Exemplary Claim Number: 1
Number of Drawing Sheets: 4

Full | Title | Citation | Front | Review | Classification | Date | Reference
KWIC | Draw Desc | Image

☐ 5. Document ID: US 5599420 A

L1: Entry 5 of 10 File: USPT Feb 4, 1997

US-PAT-NO: 5599420
DOCUMENT-IDENTIFIER: US 5599420 A

TITLE: Patterned embossed nonwoven fabric, cloth-like liquid barrier material and method for making same

DATE-ISSUED: February 4, 1997

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Yeo; Richard S.	Dunwoody	GA		
Uitenbroek; Duane G.	Little Chute	WI		
Powers; Jennifer R.	Woodstock	GA		

US-CL-CURRENT: 156/290; 156/167, 156/220, 156/308.2, 156/309.9, 604/366, 604/370

ABSTRACT:

A patterned nonwoven fabric comprising polymeric strands which include a primary polymeric component and are bonded together without the use of compression, but instead with a heat activated adhesive polymeric component which adheres the respective primary components together. The fabric has an embossed pattern of densified areas separated by high loft areas. Preferably, the strands are continuous, crimped, multicomponent filaments. Also preferably, the nonwoven fabric is laminated to a liquid barrier film to form an outercover material for products such as personal care absorbent articles, and the like. Methods for making these materials are also encompassed.

14 Claims, 6 Drawing figures Exemplary Claim Number: 1
Number of Drawing Sheets: 3

☐ 6. Document ID: US 5545464 A

L1: Entry 6 of 10 File: USPT Aug 13, 1996

US-PAT-NO: 5545464
DOCUMENT-IDENTIFIER: US 5545464 A

TITLE: Conjugate fiber nonwoven fabric

DATE-ISSUED: August 13, 1996

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Stokes; Ty J.	Suwanee	GA		

US-CL-CURRENT: 428/198; 128/849, 2/114, 2/457, 2/901, 428/221, 428/373, 442/361, 442/363, 442/364

ABSTRACT:

The present invention provides a pattern bonded nonwoven fabric containing conjugate fibers. The conjugate fibers contain a higher melting component polymer and a lower melting component polymer, wherein the higher melting component polymer envelopes the lower melting component polymer and forms the peripheral surface along the length of the fibers. The present invention also provides articles produced from the conjugate fiber fabric.

20 Claims, 6 Drawing figures Exemplary Claim Number: 1
Number of Drawing Sheets: 4

☐ 7. Document ID: US 5543206 A

L1: Entry 7 of 10 File: USPT Aug 6, 1996

US-PAT-NO: 5543206
DOCUMENT-IDENTIFIER: US 5543206 A

TITLE: Nonwoven composite fabrics

DATE-ISSUED: August 6, 1996

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Austin; Jared A.	Greer	SC		
Newkirk; David D.	Greer	SC		

US-CL-CURRENT: 428/198; 2/111, 2/401, 2/78.3, 442/398, 442/415, 604/385.24

ABSTRACT:

The invention is directed to composite nonwoven fabrics and processes for producing the same. The fabric includes a layer of inelastic continuous or staple fibers formed from a blend of polyethylene and polypropylene laminated to an extensible web, such as a polyolefin film. Preferably, the composition of the fibers ranges between 5 to 50 percent by weight of polypropylene with the balance made up of polyethylene. The nonelastic fibers are capable of being highly elongated upon mechanical stretching without adversely impacting fiber tie down. Accordingly, a smooth, strong, coherent fabric is obtained, which is especially well suited for incorporation into disposable absorbent articles such as diapers, training pants, incontinence briefs and feminine hygiene products.

20 Claims, 4 Drawing figures Exemplary Claim Number: 1
Number of Drawing Sheets: 1

☐ 8. Document ID: US 5446100 A

L1: Entry 8 of 10 File: USPT Aug 29, 1995

US-PAT-NO: 5446100
DOCUMENT-IDENTIFIER: US 5446100 A

TITLE: Environmentally friendly polymeric web compositions

DATE-ISSUED: August 29, 1995

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Durrance; Debra H.	Lilburn	GA		
Sasse; Philip A.	Alpharetta	GA		

US-CL-CURRENT: 525/221; 428/198, 442/361, 442/400, 442/401, 525/227, 525/240

ABSTRACT:

The properties of (meth)acrylic ester/(meth)acrylic acid copolymer webs, such as films and nonwovens, are improved by blending the ester/acid copolymer with a copolymer of ethylene and acrylic acid. The copolymer blend provides a polymeric material which is useful for making personal care products such as diapers and feminine pads in that it can be made water-soluble while exhibiting other properties which are necessary for adequate product performance.

21 Claims, 0 Drawing figures Exemplary Claim Number: 1

☐ 9. Document ID: US 5399174 A

L1: Entry 9 of 10 File: USPT Mar 21, 1995

US-PAT-NO: 5399174
DOCUMENT-IDENTIFIER: US 5399174 A

TITLE: Patterned embossed nonwoven fabric, cloth-like liquid barrier material

DATE-ISSUED: March 21, 1995

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Yeo; Richard S.	Dunwoody	GA		
Uitenbroek; Duane G.	Little Chute	WI		
Powers; Jennifer R.	Woodstock	GA		

US-CL-CURRENT: 604/365; 604/366, 604/370, 604/378, 604/384

ABSTRACT:

A patterned nonwoven fabric comprising polymeric strands which include a primary polymeric component and are bonded together without the use of compression, but instead with a heat activated adhesive polymeric component which adheres the respective primary components together. The fabric has an embossed pattern of densified areas separated by high loft areas. Preferably, the strands are continuous, crimped, multicomponent filaments. Also preferably, the nonwoven fabric is laminated to a liquid barrier film to form an outercover material for products such as personal care absorbent articles, and the like. Methods for making these materials are also encompassed.

14 Claims, 6 Drawing figures Exemplary Claim Number: 1
Number of Drawing Sheets: 3

Full | Title | Citation | Front | Review | Classification | Date | Reference

KWIC | Draw Desc | Image

☐ 10. Document ID: US 5208098 A

L1: Entry 10 of 10 File: USPT May 4, 1993

US-PAT-NO: 5208098
DOCUMENT-IDENTIFIER: US 5208098 A

TITLE: Self-bonded nonwoven web and porous film composites

DATE-ISSUED: May 4, 1993

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Stover; Walter H.	Marietta	GA		

US-CL-CURRENT: 442/398; 428/171, 428/172

ABSTRACT:

A self-bonded nonwoven web and porous film composite comprising at least one layer of a self-bonded, fibrous nonwoven web comprising substantially continuous filaments adhered to at least one layer of a polymeric porous film and having vapor-permeable and liquid-impermeable properties.

17 Claims, 2 Drawing figures Exemplary Claim Number: 1
Number of Drawing Sheets: 2

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☐ 1. Document ID: US 6294222 B1

L1: Entry 1 of 10 File: USPT Sep 25, 2001

US-PAT-NO: 6294222
DOCUMENT-IDENTIFIER: US 6294222 B1

TITLE: Method of attaching a substantially uniform distribution of particulates to individual exposed surfaces of a substrate

DATE-ISSUED: September 25, 2001

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Cohen; Bernard	Berkeley Lake	GA		
Faass; Judith Katherine	Dawsonville	GA		
Gipson; Lamar Heath	Acworth	GA		
Jameson; Lee Kirby	Roswell	GA		

US-CL-CURRENT: 427/459; 427/213, 427/213.32, 427/224, 427/353, 427/357, 427/359, 427/372.2, 427/385.5, 427/460, 427/461 , 427/470, 427/482, 427/485, 427/508, 427/513

ABSTRACT:

A method of attaching a substantially uniform distribution of particulates to individual exposed surfaces of a matrix of fibrous material. The method includes the following steps: 1) electrically charging a matrix of fibrous material having individual exposed surfaces to create a substantially uniform distribution of charged sites at the exposed surfaces; 2) applying particulates to the charged matrix of fibrous material so that at least some particulates adhere at the charged sites; and 3) attaching particulates adhering to the fibrous material at charged sites by substantially non-transient bonding.

17 Claims, 16 Drawing figures Exemplary Claim Number: 1
Number of Drawing Sheets: 10

Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw Desc | Image

☐ 2. Document ID: US 6239047 B1

L1: Entry 2 of 10 File: USPT May 29, 2001

US-PAT-NO: 6239047
DOCUMENT-IDENTIFIER: US 6239047 B1

TITLE: Wettable soft polyolefin fibers and fabric

DATE-ISSUED: May 29, 2001

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Erdos; Valeria Griep	Huntersville	NC		
Viramontes; Carlos	San Luis Potosi			MXX
Guajardo; Rocio	San Luis Potosi			MXX

US-CL-CURRENT: 442/119; 442/118

ABSTRACT:

A wettable fiber or filament comprises a melt additive to a thermoplastic polyolefin such as polypropylene. The melt additive is a polyethylene oleiyl ether having the formula:

R--O--{--CH.sub.2 --CH.sub.2 --O}.sub.x --CH.sub.2 --CH.sub.2 --O--H

where x is an integer from 1-15, and

R.dbd.CH.sub.3 --(CH.sub.2).sub.7 --CH.dbd.CH--(CH).sub.8 --

When the foregoing ether is added to a melt of polypropylene at levels of 2-15% by weight prior to the extrusion of the fibers or filaments, and the fibers or filaments are formed into fabrics, the fibers, filaments, or fabrics will exhibit permanent wettability, as well as excellent drape and softness. Such fabrics are useful, for example, as the skin contacting inner lining fabric of sanitary articles such as diapers, feminine hygiene products and the like.

3 Claims, 0 Drawing figures Exemplary Claim Number: 1

☐ 3. Document ID: US 6207599 B1

L1: Entry 3 of 10 File: USPT Mar 27, 2001

US-PAT-NO: 6207599
DOCUMENT-IDENTIFIER: US 6207599 B1

TITLE: Nonwoven backing and carpet comprising same

DATE-ISSUED: March 27, 2001

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Coolen; Peter Thomas	Asheville	NC		
Johnson, III; Samuel T.	Arden	NC		

US-CL-CURRENT: 442/242; 428/95, 442/245, 442/254, 442/255, 442/263, 442/275, 442/277

ABSTRACT:

A nonwoven primary carpet backing includes thermoplastic polymer filaments or fibers bonded by means of a binder polymer. The backing includes at least a distinguishable thermoplastic woven layer, a distinguishable thermoplastic continuous layer, or a distinguishable nonwoven layer including filaments or fibers bonded by means of a binder polymer, which layer reduces the delamination strength of the backing, measured in accordance with DIN 54310, by at least 30% and preferably by at least 50%, with respect to the same backing without the distinguishable layer. Although the breaking strength of the untufted backing according to the invention is lower than that of untufted backings not including the distinguishable layer, the tufted backing according to the invention actually has a higher breaking strength and elongation than tufted backings not including the distinguishable layer.

16 Claims, 2 Drawing figures Exemplary Claim Number: 1
Number of Drawing Sheets: 1

☐ 4. Document ID: US 6150020 A

L1: Entry 4 of 10 File: USPT Nov 21, 2000

US-PAT-NO: 6150020
DOCUMENT-IDENTIFIER: US 6150020 A

TITLE: Articles exhibiting improved hydrophobicity

DATE-ISSUED: November 21, 2000

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Dharmadhikary; Rahul K.	Taunton	MA		
Coslett; W. Andrew	Medfield	MA		
Gardiner; Eric S.	Westtown	NY		

US-CL-CURRENT: 428/394; 264/328.1, 428/395, 524/188, 524/262, 524/263, 524/265, 524/267, 524/269

ABSTRACT:

The specification discloses polymeric articles such as fibers and fibrous webs which exhibit improved hydrophobicity and methods for making the articles. The articles comprise a polymer selected from the group consisting of polyolefins and polyesters and an additive of the structure R.sup.1 --A--Si(R.sup.2 R.sup.3)--O--(Si(R.sup.4 R.sup.5)--O)n--Si--(R.sup.6 R.sup.7)--A--R.sup.8, wherein R.sup.1 and R.sup.8 are selected from the group consisting of alkyl, aryl, alkylaryl groups and acyl and arylacyl derivatives of an aliphatic or aliphatic/aromatic mono-acid with a molecular weight of from about 250 to about 600 daltons, A is selected from the group consisting of --O--, --NH--C(O)--NH--(CH.sub.2).sub.3 --, and --C(O)--NH--(CH.sub.2).sub.3 --, R.sup.2, R.sup.3, R.sup.6 and R.sup.7 are selected from the group consisting of CH.sub.3, C.sub.2 H.sub.5, C.sub.3 H.sub.7, and C.sub.4 H.sub.9, R.sup.4 and R.sup.5 are selected from the group consisting of CH.sub.3, C.sub.2 H.sub.5, C.sub.3 H.sub.7, and (CH.sub.2).sub.I --C.sub.j F.sub.2j+1, wherein I is from 0 to 3 and j is an integer from I to 3, and n is an integer from 7 to 70.

36 Claims, 0 Drawing figures Exemplary Claim Number: 1

☐ 5. Document ID: US 6103647 A

L1: Entry 5 of 10 File: USPT Aug 15, 2000

US-PAT-NO: 6103647
DOCUMENT-IDENTIFIER: US 6103647 A

TITLE: Nonwoven fabric laminate with good conformability

DATE-ISSUED: August 15, 2000

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Shultz; Jay Sheldon	Roswell	GA		
Shawver; Susan Elaine	Roswell	GA		
Collier, IV; Leslie Warren	Roswell	GA		
Estey; Paul Windsor	Cumming	GA		

US-CL-CURRENT: 442/346; 128/849, 442/392

ABSTRACT:

There is provided a laminate having at least one layer of meltblown elastic fibers bonded on either side with a layer of soft non-elastic fibers of greater than 7 microns in average diameter. The laminate has a drape stiffness less than half of a similar fabric having a layer of meltblown non-elastic fibers in place of the layer of meltblown elastic fibers.

24 Claims, 0 Drawing figures Exemplary Claim Number: 1

☐ 6. Document ID: US 6077890 A

L1: Entry 6 of 10 File: USPT Jun 20, 2000

US-PAT-NO: 6077890
DOCUMENT-IDENTIFIER: US 6077890 A

TITLE: Stabilizer formulation for thermoplastic polymers

DATE-ISSUED: June 20, 2000

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Hudson; Robert L.	Roswell	GA		
Delucia; Mary Lou	Roswell	GA		

US-CL-CURRENT: 524/100; 524/148, 524/153, 524/236, 524/400

ABSTRACT:

A stabilizer formulation particularly well suited for improving the properties of thermoplastic polymers is disclosed. The stabilizer formulation contains a combination of stabilizers that improves the process stability of a polymer, prevents the polymer from yellowing, increases the thermal aging stability of the polymer and inhibits the polymer from generating smoke during melt processing. Of particular advantage, the stabilizer formulation improves the stability of a polymer without significantly adversely affecting any other properties of the polymer. In one embodiment, the stabilizer formulation includes a hindered amine, a hydroxyl amine, and one or more hydrolytically resistant phosphites. In one embodiment, the formulation can further contain an acid scavenger for preventing an acid contained within the polymer or produced during processing from harming the polymer.

25 Claims, 0 Drawing figures Exemplary Claim Number: 1

☐ 7. Document ID: US 5616408 A

L1: Entry 7 of 10 File: USPT Apr 1, 1997

US-PAT-NO: 5616408
DOCUMENT-IDENTIFIER: US 5616408 A

TITLE: Meltblown polyethylene fabrics and processes of making same

DATE-ISSUED: April 1, 1997

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Oleszczuk; Andrew R.	Simpsonville	SC		
Gessner; Scott L.	Encinitas	CA		

US-CL-CURRENT: 442/346; 156/306.6, 156/308.2, 264/176.1, 428/903, 442/347, 442/400, 525/240

ABSTRACT:

A nonwoven web of meltblown microfibers formed of a composition of polyethylene and at least one component added to provide processing stability to the polyethylene component. The meltblown web can be produced at high polymer throughputs and exhibits good barrier properties. The meltblown web is useful as a component of a composite fabric, which can be used for barrier application in medical and industrial applications.

24 Claims, 2 Drawing figures Exemplary Claim Number: 1
Number of Drawing Sheets: 1

☐ 8. Document ID: US 5415925 A

L1: Entry 8 of 10 File: USPT May 16, 1995

US-PAT-NO: 5415925
DOCUMENT-IDENTIFIER: US 5415925 A

TITLE: Gamma structure composite nonwoven fabric comprising at least two nonwoven webs adhesively bonded by a lightweight adhesive web

DATE-ISSUED: May 16, 1995

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Austin; Jared A.	Greer	SC		
Berman; Mark H. S.	Simpsonville	SC		
Dunleavy; Raymond A.	Greer	SC		

US-CL-CURRENT: 442/346; 428/373, 442/382

ABSTRACT:

The invention is directed to a composite nonwoven fabric comprising a nonwoven web of spunbonded substantially continuous thermoplastic filaments, a nonwoven web of thermoplastic strands, and a nonwoven web of thermoplastic meltblown microfibers sandwiched between the nonwoven web of spunbonded substantially continuous filaments and the nonwoven web of thermoplastic strands. An adhesive agent is disposed between the nonwoven web of spunbonded filaments and the nonwoven web of meltblown microfibers and between the nonwoven web of thermoplastic strands and the nonwoven web of meltblown microfibers, adhering the respective nonwoven webs together to form a unitary composite nonwoven fabric. In a preferred embodiment, the composite nonwoven fabric of the invention comprises a nonwoven web of spunbonded substantially continuous polyamide filaments, a nonwoven web of polyamide strands, and a nonwoven web of polyethylene meltblown microfibers sandwiched between the nonwoven web of spunbonded substantially continuous filaments and the nonwoven web of strands.

18 Claims, 2 Drawing figures Exemplary Claim Number: 1
Number of Drawing Sheets: 1

☐ 9. Document ID: US 5393831 A

L1: Entry 9 of 10 File: USPT Feb 28, 1995

US-PAT-NO: 5393831
DOCUMENT-IDENTIFIER: US 5393831 A

TITLE: Shelf stable nonwoven fabrics and films

DATE-ISSUED: February 28, 1995

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Hudson; Robert L.	Roswell	GA		

US-CL-CURRENT: 525/55; 428/913, 442/400, 442/401, 523/126, 525/193, 525/195, 525/245, 525/326.1, 525/370, 525/383

ABSTRACT:

Shelf stable nonwoven fabrics and films are made from polyolefin compositions which comprise a polyolefin which contains no more than a minor amount of a phenolic antioxidant, a water-sensitive stabilizer, a transition metal organic salt and an oxidizable unsaturated compound.

19 Claims, 0 Drawing figures Exemplary Claim Number: 1

Full | Title | Citation | Front | Review | Classification | Date | Reference | KWIC | Draw Desc | Image

☐ 10. Document ID: US 5372885 A

L1: Entry 10 of 10 File: USPT Dec 13, 1994

US-PAT-NO: 5372885
DOCUMENT-IDENTIFIER: US 5372885 A

TITLE: Method for making bicomponent fibers

DATE-ISSUED: December 13, 1994

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Tabor; Ricky L.	Lake Jackson	TX		
Jezic; Zdravko	Lake Jackson	TX		
Lancaster; Gerald M.	Freeport	TX		
Young; Gene P.	Lake Jackson	TX		
Bieser; John O.	Lake Jackson	TX		
Finlayson; Malcolm F.	Houston	TX		

US-CL-CURRENT: 428/373; 264/172.12, 264/172.14, 264/172.15, 264/DIG.26, 428/374, 428/375, 428/395

ABSTRACT:

A method is disclosed for making thermoplastic bicomponent fibers by contacting under thermally bonding conditions (a) a first component being at least one high performance thermoplastic polymer, such as PET, PBT, nylon or the like, and (b) a second component which is olefinic and which forms at least a portion of the fiber's surface characterized by (b) including at least one grafted olefinic polymer, preferably at least one grafted linear ethylene polymer, having pendant succinic acid or succinic anhydride groups; whereby the fiber is dyeable. The bicomponent fibers made by this process can be in a variety of shapes (e.g., round, oval, trilobal, flat, or hollow) and configurations (e.g., symmetrical sheath/core or side-by-side or asymmetrical crescent/moon). The succinic acid or succinic anhydride groups are provided by grafting, respectively, maleic acid or maleic anhydride onto the linear ethylene polymers especially by a process wherein the grafting is done in a twin-screw, co-rotating extruder with the maleic acid or maleic anhydride being injected into a pressured zone of the extruder. The acid containing grafted linear ethylene polymer or polymer blends are dyeable in contradistinction to ungrafted linear ethylene polymers.

6 Claims, 0 Drawing figures Exemplary Claim Number: 1

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☐ 1. Document ID: US 6225243 B1

L2: Entry 1 of 9 File: USPT May 1, 2001

US-PAT-NO: 6225243
DOCUMENT-IDENTIFIER: US 6225243 B1

TITLE: Elastic nonwoven fabric prepared from bi-component filaments

DATE-ISSUED: May 1, 2001

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Austin; Jared A.	Greer	SC		

US-CL-CURRENT: 442/361; 442/328, 442/329, 442/362, 442/364

ABSTRACT:

A bonded web of multi-component strands that include a first polymeric component and a second polymeric component is capable of overcoming a number of problems associated with nonwoven webs including both stickiness and blocking. The first polymeric component and second polymeric components are arranged in substantially distinct zones extending longitudinally along at least a portion of a length of the strands which make up the web with the second component containing a zone constituting at least a portion of the peripheral surface of the strand. Moreover, the first polymeric component has an elasticity which is greater than that of the second polymer component.

A process producing elastomeric spunbonded nonwoven fabrics which utilizes air in attenuating and/or drawing of strands is also provided.

18 Claims, 12 Drawing figures Exemplary Claim Number: 1
Number of Drawing Sheets: 7

Full | Title | Citation | Front | Review | Classification | Date | Reference | KWMC | Draw Desc | Image

☐ 2. Document ID: US 6103061 A

L2: Entry 2 of 9 File: USPT Aug 15, 2000

US-PAT-NO: 6103061
DOCUMENT-IDENTIFIER: US 6103061 A

TITLE: Soft, strong hydraulically entangled nonwoven composite material and method for making the same

DATE-ISSUED: August 15, 2000

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Anderson; Ralph L.	Marietta	GA		
Merker; Joseph F.	Alpharetta	GA		
Radwanski; Fred Robert	Roswell	GA		
Skoog; Henry	Roswell	GA		

US-CL-CURRENT: 162/108; 111/112, 111/115, 111/134, 111/135, 111/146

ABSTRACT:

A method of making a nonwoven composite material. The method includes the steps of: providing a hydraulically entangled web containing a fibrous component and a nonwoven layer of substantially continuous filaments; applying a bonding material to at least one side of said web; and creping said at least one side of the hydraulically entangled web. The bonder material may be an aqueous mixture including a curable latex polymer, a pigment, and a cure promoter. Also disclosed is a nonwoven composite material made of a hydraulically entangled web including a fibrous component; a nonwoven layer of substantially continuous filaments; and regions containing bonder material covering at least a portion of at least one side of the composite material, wherein at least one side of the web has been creped.

32 Claims, 2 Drawing figures Exemplary Claim Number: 1
Number of Drawing Sheets: 2

☐ 3. Document ID: US 6090731 A

L2: Entry 3 of 9 File: USPT Jul 18, 2000

US-PAT-NO: 6090731
DOCUMENT-IDENTIFIER: US 6090731 A

TITLE: High density nonwoven filter media

DATE-ISSUED: July 18, 2000

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Pike; Richard Daniel	Norcross	GA		
Brown; Kurtis Lee	Appleton	WI		
Shipp, Jr.; Peter Wyndham	Woodstock	GA		

US-CL-CURRENT: 442/409; 442/340, 442/351, 442/361, 442/382, 442/411

ABSTRACT:

The invention provides a sheet filter medium having autogenously bonded uncrimped conjugate fibers which contain a polyolefin and another thermoplastic polymer that have different melting points. The filter medium has a density between about 0.07 g/cm.sup.3 and about 0.2 g/cm.sup.3. The invention additionally provides a three-dimensionally thermoformed filter medium that has a density between about 0.07 g/cm.sup.3 and about 0.5 g/cm.sup.3.

29 Claims, 7 Drawing figures Exemplary Claim Number: 1
Number of Drawing Sheets: 7

☐ 4. Document ID: US 5901706 A

L2: Entry 4 of 9 File: USPT May 11, 1999

US-PAT-NO: 5901706
DOCUMENT-IDENTIFIER: US 5901706 A

TITLE: Absorbent surgical drape

DATE-ISSUED: May 11, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Griesbach; Henry L.	Atlanta	GA		
Mathis; Michael P.	Marietta	GA		
Bowen, Jr.; Uyles Woodrow	Canton	GA		

US-CL-CURRENT: 128/849; 128/852

ABSTRACT:

The present invention is directed to novel absorbent surgical drapes containing at least one hydrophilic meltspun fabric layer and a liquid impervious film layer. The meltspun fabric layer may include at least one spunbonded fabric, meltblown fabric or other nonwoven fabric that is made hydrophilic. The filaments or microfibers of the spunbonded or meltblown fabrics may contain a hydrophilic additive in or on the filaments or microfibers. In one embodiment, the film of the surgical drape is breathable. In another embodiment, the film of the surgical drape has anti-slip properties, due to the inherent properties of the film or to a pattern coating of latex or hot melt adhesive on an exposed surface of the film.

24 Claims, 2 Drawing figures Exemplary Claim Number: 1
Number of Drawing Sheets: 1

☐ 5. Document ID: US 5871836 A

L2: Entry 5 of 9 File: USPT Feb 16, 1999

US-PAT-NO: 5871836
DOCUMENT-IDENTIFIER: US 5871836 A

TITLE: Composite pleated fibrous structures containing split film fibers

DATE-ISSUED: February 16, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Schultink; Jan	Eksel			BEX
Schultink; Bas	Overpelt			BEX
Wadsworth; Larry C.	Knoxville	TN		

US-CL-CURRENT: 428/181; 428/182, 55/521

ABSTRACT:

A novel pleated fibrous structure is disclosed, which fibrous structure comprises a layer of a pleated split fiber film. The layer of split fiber film may be electrostatically charged. The pleated split fiber film may be part of a composite fibrous structure further comprising a support of a nonwoven or scrim.

35 Claims, 18 Drawing figures Exemplary Claim Number: 1
Number of Drawing Sheets: 11

☐ 6. Document ID: US 5855784 A

L2: Entry 6 of 9 File: USPT Jan 5, 1999

US-PAT-NO: 5855784
DOCUMENT-IDENTIFIER: US 5855784 A

TITLE: High density nonwoven filter media

DATE-ISSUED: January 5, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Pike; Richard Daniel	Norcross	GA		
Brown; Kurtis Lee	Appleton	WI		
Shipp, Jr.; Peter Wyndham	Woodstock	GA		

US-CL-CURRENT: 210/505; 210/503, 210/508, 210/510.1, 428/373, 428/374, 442/224, 442/361, 442/362, 442/364, 442/401

ABSTRACT:

The invention provides a sheet filter medium having autogenously bonded uncrimped conjugate fibers which contain a polyolefin and another thermoplastic polymer that have different melting points. The filter medium has a density between about 0.07 g/cm.sup.3 and about 0.2 g/cm.sup.3. The invention additionally provides a three-dimensionally thermoformed filter medium that has a density between about 0.07 g/cm.sup.3 and about 0.5 g/cm.sup.3.

29 Claims, 7 Drawing figures Exemplary Claim Number: 1
Number of Drawing Sheets: 7

Full | Title | Citation | Front | Review | Classification | Date | Reference | KWIC | Draw Desc | Image

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☐ 7. Document ID: US 5688588 A

L2: Entry 7 of 9 File: USPT Nov 18, 1997

US-PAT-NO: 5688588
DOCUMENT-IDENTIFIER: US 5688588 A

TITLE: Water purification device

DATE-ISSUED: November 18, 1997

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Cotton; James Dennis	Marietta	GA		
Everhart; Dennis Stein	Alpharetta	GA		
Gadsby; Elizabeth Deibler	Mareitta	GA		

US-CL-CURRENT: 428/305.5; 210/282, 210/289, 210/484, 210/497.2, 210/501, 210/502.1, 210/504, 210/505, 239/33, 428/311.11

ABSTRACT:

A drinking straw that purifies water by forced movement of water through the straw. The straw is composed of: 1) a filter plug made of a fibrous structure, the filter plug having sides, a first end, a second end, and a firmness sufficient to avoid collapse of the fibrous structure under a specified pressure drop; 2) a water purification material integrated in the fibrous structure; and 3) a liquid impervious wrapper covering the sides of the filter plug, the wrapper defining openings at the first and second ends of the filter plug.

37 Claims, 4 Drawing figures Exemplary Claim Number: 1,13
Number of Drawing Sheets: 4

☐ 8. Document ID: US 5455110 A

L2: Entry 8 of 9 File: USPT Oct 3, 1995

US-PAT-NO: 5455110
DOCUMENT-IDENTIFIER: US 5455110 A

TITLE: Nonwoven laminated fabrics

DATE-ISSUED: October 3, 1995

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Connor; Linda A.	Roswell	GA		

US-CL-CURRENT: 442/382; 428/903, 442/381

ABSTRACT:

Fabrics having good bulk, barrier properties and air permeability are made by laminating a first flat spunbond web formed from thermoplastic fibers, a three-dimensional nonwoven meltblown web formed from thermoplastic fibers and a second flat spunbond web formed from thermoplastic fibers, wherein the three-dimensional nonwoven web is located between the first and second spunbond webs.

10 Claims, 3 Drawing figures Exemplary Claim Number: 1
Number of Drawing Sheets: 2

☐ 9. Document ID: US 5204165 A

L2: Entry 9 of 9 File: USPT Apr 20, 1993

US-PAT-NO: 5204165
DOCUMENT-IDENTIFIER: US 5204165 A

TITLE: Nonwoven laminate with wet-laid barrier fabric and related method

DATE-ISSUED: April 20, 1993

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Schortmann; Walter E.	Cumberland	RI		

US-CL-CURRENT: 428/198; 156/290, 156/306.6, 156/308.2, 156/73.1, 428/171, 428/172, 428/326, 428/421, 428/422, 428/913

ABSTRACT:

A nonwoven laminate, having a barrier property, is made of at least one thermoplastic fiber layer bonded with a wet-laid fabric layer, made of a uniform distribution of cellulose fibers, polymeric fibers, and a binder, which is treated with a water-repellent finish. Alternatively, the wet-laid fabric layer can be made without the addition of any binders to form a tissue-type core fabric layer. In a preferred form, spunbond polyester fiber layers are ultrasonically bonded on each side of a wet-laid barrier fabric made of about 20% eucalyptus pulp, 45% staple polyester fibers of 1.5 denier, and 35% polyester fibers of finer denier of about 0.6 denier, which is bonded with an acrylic latex binder and treated with a water-repellent finish that includes a fluorocarbon compound. The resulting laminate has a desired drapability and soft hand. Combined with the low unit cost, air permeability and water-resistant barrier properties, the wet-laid barrier fabrics of the invention are suitable for industrial, hospital, and other protective or covering uses.

30 Claims, 5 Drawing figures Exemplary Claim Number: 1
Number of Drawing Sheets: 2

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☐ 1. Document ID: US 6216700 B1

L3: Entry 1 of 9 File: USPT Apr 17, 2001

US-PAT-NO: 6216700
DOCUMENT-IDENTIFIER: US 6216700 B1

TITLE: Surgical drape and surgical drape kit

DATE-ISSUED: April 17, 2001

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Griesbach; Henry L.	Atlanta	GA		
Dowdy; Richard C.	Duluth	GA		
Hafer; Gregory S.	Roswell	GA		

US-CL-CURRENT: 128/849; 128/852

ABSTRACT:

A surgical drape and surgical drape kit are provided for engaging a hook fastener to fasten the surgical drape to an object. The surgical drape includes a fabric including a nonwoven layer, the nonwoven layer having a surface including a plurality of strands. The strands are arranged on the surface with a plurality of bonds spaced about the surface and a plurality of loops extending between the bonds, the loops being engageable with the hook fastener for fastening the surgical drape to the object. The surgical drape kit may also include a plurality of surgical drapes for use together during a surgical procedure, the loops being engageable with the hook fastener for fastening the surgical drapes together.

8 Claims, 8 Drawing figures Exemplary Claim Number: 1
Number of Drawing Sheets: 4

Full | Title | Citation | Front | Review | Classification | Date | Reference | KWIC | Draw Desc | Image

☐ 2. Document ID: US 6207602 B1

L3: Entry 2 of 9 File: USPT Mar 27, 2001

US-PAT-NO: 6207602
DOCUMENT-IDENTIFIER: US 6207602 B1

TITLE: Nonwoven fabrics and fabric laminates from multiconstituent polyolefin fibers

DATE-ISSUED: March 27, 2001

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Gessner; Scott L.	Encinitas	CA		
Gillespie; J. Darrell	Simpsonville	SC		
Austin; Jared A.	Greer	SC		
Newkirk; David D.	Greer	SC		
Fowells; William	Washougal	WA		

US-CL-CURRENT: 442/363; 442/365, 525/240

ABSTRACT:

Nonwoven fabrics and fabric laminates are formed from continuous filaments or staple fibers of a select blend of specific grades of polyethylene and polypropylene which give improved fabric performance not heretofore recognized or described, such as high abrasion resistance, good tensile properties, excellent softness and the like. Furthermore, these blends have excellent melt spinning and processing properties which permit efficiently producing nonwoven fabrics at high productivity levels. The polymers are present as a lower-melting dominant continuous phase and at least one higher-melting noncontinuous phase dispersed therein. The lower-melting continuous phase forms at least 70 percent by weight of the fiber and comprises a linear low density polyethylene polymer of a melt index of greater than 10 and a density of less than 0.945 g/cc. At least one higher-melting noncontinuous phase comprises a polypropylene polymer with melt flow rate of greater than 20 g/10 min.

9 Claims, 4 Drawing figures Exemplary Claim Number: 1
Number of Drawing Sheets: 1

☐ 3. Document ID: US 6055987 A

L3: Entry 3 of 9 File: USPT May 2, 2000

US-PAT-NO: 6055987
DOCUMENT-IDENTIFIER: US 6055987 A

TITLE: Surgical drape and surgical drape kit

DATE-ISSUED: May 2, 2000

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Griesbach; Henry L.	Atlanta	GA		
Dowdy; Richard C.	Duluth	GA		
Hafer; Gregory S.	Roswell	GA		

US-CL-CURRENT: 128/849; 128/852

ABSTRACT:

A surgical drape and surgical drape kit are provided for engaging a hook fastener to fasten the surgical drape to an object. The surgical drape comprises a fabric including a nonwoven layer, the nonwoven layer having a surface including a plurality of strands. The strands are arranged on the surface with a plurality of bonds spaced about the surface and a plurality of loops extending between the bonds, the loops being engageable with the hook fastener for fastening the surgical drape to the object. The surgical drape kit may also comprise a plurality of surgical drapes for use together during a surgical procedure, the loops being engageable with the hook fastener for fastening the surgical drapes together.

30 Claims, 8 Drawing figures Exemplary Claim Number: 1
Number of Drawing Sheets: 4

☐ 4. Document ID: US 5885909 A

L3: Entry 4 of 9 File: USPT Mar 23, 1999

US-PAT-NO: 5885909
DOCUMENT-IDENTIFIER: US 5885909 A

TITLE: Low or sub-denier nonwoven fibrous structures

DATE-ISSUED: March 23, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Rudisill; Edgar N.	Hermitage	TN		
Frankfort; Hans Rudolf Edward	Winterville	NC		
Janis; Rudolph F.	Richmond	VA		
Johnson; Stephen Buckner	Wilmington	NC		
McGinty; David Jackson	Midlothian	VA		
Samuelson; H. Vaughn	Chadds Ford	PA		
Shin; Hyunkook	Wilmington	DE		
Vassilatos; George	Wilmington	DE		

US-CL-CURRENT: 442/82; 442/334, 442/337, 442/340, 442/361, 442/364, 442/382

ABSTRACT:

This invention relates to a new nonwoven material which has very high Frazier permeability while having substantial hydrostatic head liquid barrier properties. The material is comprised of fibers which are approximately one denier and finer fibers which have sufficient strength properties so as not to need a support scrim. The fabric is quite comfortable because of its breathability, quite soft because of its construction, and protective from liquids from rain to hazardous chemicals.

75 Claims, 6 Drawing figures Exemplary Claim Number: 1
Number of Drawing Sheets: 6

☐ 5. Document ID: US 5873968 A

L3: Entry 5 of 9 File: USPT Feb 23, 1999

US-PAT-NO: 5873968
DOCUMENT-IDENTIFIER: US 5873968 A

TITLE: Laminate filter media

DATE-ISSUED: February 23, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Pike; Richard Daniel	Norcross	GA		
Shipp, Jr.; Peter Wyndham	Woodstock	GA		

US-CL-CURRENT: 156/73.2; 156/273.1, 156/290, 156/296, 156/308.4, 156/62.6

ABSTRACT:

The present invention provides a self-supporting laminate filter medium having an electret lofty spunbond web and an electret microfiber web, wherein the spunbond web has a density between about 0.01 g/cm.sup.3 and about 0.1 g/cm.sup.3.

14 Claims, 1 Drawing figures Exemplary Claim Number: 1
Number of Drawing Sheets: 1

Full | Title | Citation | Front | Review | Classification | Date | Reference KWIC | Draw Desc | Image

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☐ 6. Document ID: US 5814570 A

L3: Entry 6 of 9 File: USPT Sep 29, 1998

US-PAT-NO: 5814570
DOCUMENT-IDENTIFIER: US 5814570 A

TITLE: Nonwoven barrier and method of making the same

DATE-ISSUED: September 29, 1998

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Cohen; Bernard	Berkeley Lake	GA		

US-CL-CURRENT: 442/346; 204/164, 428/903, 442/340, 442/351, 442/382

ABSTRACT:

A ethylene oxide sterilizable nonwoven material which is subjected to charging, and more particularly electrostatic charging is provided. The nonwoven materials may include laminate nonwovens wherein one or more layers are subjected to charging. The nonwoven material(s) may also be treated with an antistatic material before or after subjecting the same to charging.

19 Claims, 0 Drawing figures Exemplary Claim Number: 1

Full | Title | Citation | Front | Review | Classification | Date | Reference KWIC | Draw Desc | Image

☐ 7. Document ID: US 5721180 A

L3: Entry 7 of 9 File: USPT Feb 24, 1998

US-PAT-NO: 5721180
DOCUMENT-IDENTIFIER: US 5721180 A

TITLE: Laminate filter media

DATE-ISSUED: February 24, 1998

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Pike; Richard Daniel	Norcross	GA	30092	
Shipp, Jr.; Peter Wyndham	Woodstock	GA	30188	

US-CL-CURRENT: 442/346; 264/405, 442/351, 442/364, 442/382, 442/400, 442/401

ABSTRACT:

The present invention provides a self-supporting laminate filter medium having an electret lofty spunbond web and an electret microfiber web, wherein the spunbond web has a density between about 0.01 g/cm.sup.3 and about 0.1 g/cm.sup.3.

20 Claims, 1 Drawing figures Exemplary Claim Number: 1
Number of Drawing Sheets: 1

Full | Title | Citation | Front | Review | Classification | Date | Reference | KWIC | Draw Desc | Image

☐ 8. Document ID: US 5695377 A

L3: Entry 8 of 9 File: USPT Dec 9, 1997

US-PAT-NO: 5695377
DOCUMENT-IDENTIFIER: US 5695377 A

TITLE: Nonwoven fabrics having improved fiber twisting and crimping

DATE-ISSUED: December 9, 1997

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Triebes; Thomas Gregory	Atlanta	GA		
Lau; Jark Chong	Roswell	GA		

US-CL-CURRENT: 442/359; 156/62.4, 264/12, 264/210.8, 264/518, 425/464, 425/66, 425/7, 425/72.2, 425/83.1, 442/400, 442/401

ABSTRACT:

There is provided a fabric produced by a spunbond or a meltblown apparatus, wherein the apparatus has a pneumatic chamber having at least one wall containing a plurality of spaced protrusions. Preferably, both opposing walls contain protrusions aligned in staggered angled rows and the rows on one wall are angled opposite the rows on the opposing wall, thereby causing controlled lateral flow near the chamber walls. This lateral flow exhibits drag on the fibers, imparting rotational energy to the fibers. The fibers are imparted with rotational energy derived from the lateral component of the two turbulent airflow fields that oppose one another, and have a tendency to twist and crimp. Fabrics so produced have improved loft, drape, and feel and may be useable as a loop material for hook-and-loop type fasteners.

29 Claims, 5 Drawing figures Exemplary Claim Number: 1,17,28
Number of Drawing Sheets: 4

☐ 9. Document ID: US 5562994 A

L3: Entry 9 of 9 File: USPT Oct 8, 1996

US-PAT-NO: 5562994
DOCUMENT-IDENTIFIER: US 5562994 A

TITLE: Un-coated paper-making sludge substrate for metallizing

DATE-ISSUED: October 8, 1996

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Abba; William A.	Neenah	WI		
Charles; Laurine A.	Neenah	WI		
Cohen; Bernard	Berkeley Lake	GA		

US-CL-CURRENT: 428/464; 428/211, 428/333, 428/457, 428/537.5

ABSTRACT:

An un-coated paper-making sludge substrate for metallizing, the substrate containing: 1) from about 40 to about 94 percent, by weight, low-average fiber length pulp, and 2) from about 6 to about 60 percent, by weight, ash generating materials, such that the paper-making sludge substrate is adapted, upon depositing a metallic coating onto a surface of the substrate, to provide a metallized paper with at least one surface having a gloss of at least about 19. Also disclosed is a metallized paper composed of: 1) a paper-making sludge substrate having a first surface and second surface, the paper-making sludge substrate containing from about 40 to about 94 percent, by weight, low-average fiber length pulp, and from about 6 to about 60 percent, by weight, ash generating materials, the paper-making sludge substrate being free of base coatings; and 2) a metallic coating on at least one surface of the substrate, so that at least one surface of the metallized paper has a gloss of at least about 19.

20 Claims, 4 Drawing figures Exemplary Claim Number: 1
Number of Drawing Sheets: 4